CLAIMS

- 1. Device according to the invention for capturing the potential energy of water, characterised by a turbine which is constituted by the following:
- a wheel (1) having blades (2) whose shape and movement volume for the rotating part (1) allows fixed parts (4) to be fitted,
 - by fixed parts (4) which serve as a dam which is required for retaining the water level.
- 2. Device according to the invention for the distribution of the water influx (15), which device is formed by the lower portion of the fixed part, by means of channelling the water stream, which allows the kinetic energy of the water to be captured.
- 3. Device according to claim 1, characterised by a bladed wheel which is constituted by support discs (3-5) having an outer form which may be toothed or not, blade support (2), the movement volume for the assembly leaving a large inner space free for one or more fixed parts.
- 4. Device according to claim 1 and 2, characterised by discs (3-5) whose outer form, which is toothed or not allows blades to be fitted which have a hydrodynamic shape.
- 5. Device according to any one of the preceding claims, characterised by identical operation in a continuous or reversible hydraulic flow (as is the case with tides).
 - 6. Device according to the preceding claims, characterised by the function of a lift-type device for fish by the blades being equipped with flaps C1 and C2 according to Figure 3.

30

- 7. Multiform blade device for controlling the flow rate of water, these blades being constituted (Figure 6) by a fixed blade portion (17),
- by one or two movable parts (18-19) which, by means of the open position thereof, allow the space between two blades to be isolated and thus render it water-tight, which reduces the flow rate of water passing into the wheel in proportion relative to the number of blades of the wheel.

- 8. Device for controlling flow rates by producing a rotating part (1) in several sections which are connected together by means of clutch engagement-disengagement systems which are fitted on the crowns (5').
- 9. Device having blades which are inclined according to Figure 8, in which device priority is given to the use of the dynamic and kinetic water/blade energy.

12 JC20 Rec'd PCT/PTO 18 MAY 2005

AMENDED CLAIMS

[received by the International Office on 17th November 2003 (17.11.03); claim 1 amended, claims 7, 8 and 9 deleted (1 page)]

5

30

- 1. Device according to the invention for capturing the potential energy of water, characterised by a turbine which is constituted by the following:
- a wheel (1) having blades (2) whose shape and movement volume for the rotating part (1) allows fixed parts (4) to be fitted,
- fixed parts (4) which serve as a dam which is required for retaining the water level and which are located at the inner side of the rotating part of the wheel.
- 2. Device according to the invention for distributing the influx of water (15), which device is formed by the lower portion of the fixed part, by means of channelling the water stream, which allows the kinetic energy of the water to be captured.
- 3. Device according to claim 1, characterised by a bladed wheel which is constituted by support discs (3-5) having an outer form which may be toothed or not, blade support (2), the movement volume for the assembly leaving a large inner space free for one or more fixed parts.
- 4. Device according to claim 1 and 2, characterised by discs (3-5) whose outer form, which is toothed or not allows blades to be fitted which have a hydrodynamic shape.
 - 5. Device according to any one of the preceding claims, characterised by identical operation in a continuous or reversible hydraulic flow (as is the case with tides).
 - 6. Device according to the preceding claims, characterised by the function of a lift-type device for fish by the blades being equipped with flaps C1 and C2 according to Figure 3.